

REMARKS/ARGUMENTS

These remarks are made in response to the Office Action of July 16, 2007 (Office Action). As this response is timely filed within the three-month statutory period, no fee is believed due. The Office is expressly authorized, however, to charge any deficiency or credit any over-payment to Deposit Account No. 50-0951.

On the basis of new grounds of rejection noted at page 2 of the Office Action, each of the pending claims was rejected. Claims 1, 8-13, and 20-27 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hashimoto, *et al.*, "Tele-Handshake through the Internet", *IEEE Workshop on Robot and Human Communication*, 1996, pages 90-95 (hereinafter Hashimoto). Claims 3-5 and 15-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hashimoto.

Although Applicants respectfully disagree with the rejections, Applicants nevertheless have amended certain claims so as to expedite prosecution of the present application by emphasizing certain aspects of the invention. Applicants respectfully note, however, that the amendments are not intended as, and should not be interpreted as, the surrender of any subject matter. Accordingly, Applicants respectfully reserve the right to present the original version of any of the amended claims in any future divisional or continuation applications from the present application.

In particular, Applicants have amended independent Claims 1, 10, and 13 to further emphasize certain aspects of the invention. Applicants also have amended dependent Claims 15 and 21 to correct minor typographical errors. As discussed herein, the claim amendments are fully supported throughout the Specification. No new matter has been introduced by virtue of the claim amendments.

Certain Aspects Of Applicants' Invention

It may be useful at this juncture to reiterate certain aspects of Applicants' invention. One embodiment of the invention, typified by Claim 1, is a method of communicating physical human interactions over a communications network.

According to this embodiment, the method can include detecting physical contact with a first model by a first user located at a sending system. The first model can represent at least a portion of a human body. The first model can incorporate one or more contact sensors, such as force or pressure sensors, for detecting the physical contact. (See, e.g., Specification, paragraph [0022] lines 5-7.)

The method further can include detecting physical movement of the first user using one or more optical sensors located at the sending system. (See, e.g., Specification, paragraph [0022], lines 1-5.) Using the optical sensors, physical movements of the first user, such as motion of the user's body or changes in the user's facial expression. (See, e.g., Specification, paragraph [0022], lines 3-5; see also paragraph [0005], lines 2-4, and paragraph [0006], lines 2-5.)

Additionally, the method can include generating data from the sensors specifying the physical contact and/or the physical movement. The method also can include determining at least one action intended by the first user as indicated by the generated data, and transmitting the determined action over a communications network to a receiving system.

The method further can include simulating the action by performing the action on a second user at the receiving system using a second model and activating the second model according to the physical movement. (See, e.g., Specification, paragraph [0026], lines 1-9; see also paragraph [0025], lines 1-7.) More particularly, the second model can represent at least the portion of the human body and can incorporate one or more actuators for simulating the action and activating the second model according to the user's physical movement. (See, e.g., Specification, paragraph [0025], lines 1-7.)

The Claims Define Over Hashimoto

As already noted, independent Claims 1, 10, and 13 were each rejected as being anticipated by Hashimoto. Hashimoto is directed to a "tele-handshaking system (THS)" that enables individuals to "physically communicate with each other by shaking hands

through the system." (Hashimoto, section 2, page 90; see also, section 5, page 94.) To accomplish this objective, Hashimoto's THS includes two touch-responsive "HandShake Devices (HSDs)" that are remotely located from one another, but that communicate through a data communications network. (See Hashimoto, Figures 1 and 2.) Each of the HSDs includes a model of a hand that responds to "tactile feedback (force reflection)" so as to simulate at each of the remote sites the feeling of a handshake when each of the individuals grasps one of the HSDs in the manner of a handshake.

Applicants respectfully note, however, that Hashimoto is limited to one and only one type of simulation, that of handshaking. More fundamentally, Hashimoto's simulation is based exclusively on the above-mentioned "tactile feedback." Accordingly, Hashimoto fails to teach, either expressly or inherently, several different aspects of Applicants' invention.

For example, Hashimoto fails to disclose optical sensors, or any other non-tactile sensors, for detecting physical movement of a user, as recited in independent Claims 1, 10, and 13. Without one or more optical sensors, the only physical movement Hashimoto is able to detect is when a user grasps one of the HSDs; that is, Hashimoto relies exclusively on touch-responsive sensors. Hashimoto has no optical sensors to detect a body movement of the user. No action that does not involve direct contact with the HSD is detected by Hashimoto. Moreover, without an optical sensor, Hashimoto is wholly incapable of detecting a change in the facial expression of the user.

It follows that Hashimoto provides no mechanism for generating data from sensors specifying not only physical contact, but various types of physical movements of a user as well, as recited in independent Claims 1, 10, and 13. It further follows that Hashimoto is thus incapable of activating a second model according to the physical movements, such as body motion or facial expressions, detected with one or more optical sensors, as further recited in independent Claims 1, 10, and 13.

Accordingly, Hashimoto fails to teach, either expressly or inherently, every feature recited in independent Claims 1, 10, and 13. Applicants respectfully submit, therefore,

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that Claims 1, 10, and 13 define over the prior art. Applicants further respectfully submit that, whereas each of the remaining claims depends from Claim 1, 10, or 13 while reciting additional features, each of these dependent claims likewise defines over the prior art.

CONCLUSION

Applicants believe that this application is now in full condition for allowance, which action is respectfully requested. Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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